HP OpenView

Storage Mirroring application notes

Guidelines for failing over macintosh-accessible volumes

Part number: T2558–88078
Second edition: June 2006

invent

Legal and notice information

Storage Mirroring Failing over Macintosh-Accessible volumes application notes

Document overview

This document is a Storage Mirroring application note. An application note provides guidelines on the use of Storage Mirroring in a specific environment.

This document contains:

- **Document overview**—Explains what an application note contains, how it should be used, what you need to know before trying to use the application note, and where you can go for more information.
- **Solution overview**—Explains how the applications work with Storage Mirroring and describes the considerations that you must weigh when implementing your Storage Mirroring solution. Review this section to make sure that you understand the theory involved with using Storage Mirroring and your application. Includes both basics, such as system requirements, as well as configuration and environment-specific topics, such as interactions with specific clients or special considerations for WAN (Wide Area Network) environments. Pay special attention to those topics that are directly related to your environment.
- **Sample implementations**—Describes specific examples of how to use Storage Mirroring for this solution. Use these procedures as a guideline for creating your own implementation. Because no two environments or configurations are exactly the same, you will probably need to implement additional or different steps than what is documented here in order to make the solution work in your environment.

Audience

This document is written for network and application administrators who have a working understanding of the applications and environments where the Storage Mirroring solution is to be deployed. You many need to expand on the documented information in order to customize the solution to fit your environment.

Before you use this application note, you should have an understanding of:

- Storage Mirroring
- Macintosh

Expectations

Application notes are intended to provide a framework for configuring a Storage Mirroring solution in a specific environment and to draw attention to decisions you will need to make when configuring your solution.

Because there are an infinite number of possible configuration, network, and environment scenarios, application notes contain general configuration guide.

This document assumes that you are comfortable working with your operating system, Storage Mirroring, and the application(s) being used with Storage Mirroring.

Related documentation

Before you begin to configure your solution, make sure that you have complete documentation for your operating system, application(s), and Storage Mirroring. This application note does not provide step-by-step instructions for using standard operating system, application, and Storage Mirroring functionality.

The following documents contain additional information that you may need while setting up this solution:

- *HP OpenView Storage Mirroring user guide* or online documentation
- Reference guides or documentation for Macintosh

Getting help

Hewlett-Packard has application notes that describe how to configure Storage Mirroring with a variety of popular third-party applications. These application notes are available on the Storage Mirroring web site: http://h18006.www1.hp.com/products/storage/software/sm/index.html.

For help using Storage Mirroring, refer to the Storage Mirroring online manual or online help.

Solution overview

Failover is a component of Storage Mirroring that allows a target to stand in for a failed source machine. When partnered with Storage Mirroring software's data replication capabilities, failover routes user and application requests with minimal disruption and little or no data loss.

A share is any volume, drive, or directory resource that is shared across a network. During failover, the target can assume or add any source shares so that they remain accessible to the end users.

Automatic share failover only occurs for Microsoft Windows shares. However, directories shared as Macintosh volumes must be configured for failover through the failover scripts.

The purpose of this document is to show you how to configure Macintosh volumes for failover with Storage Mirroring. Due to the complexities of this application, this document is intended for network administrators with experience installing, configuring, and maintaining network applications, including Storage Mirroring

Modifying the sample script files

After you modify the sample scripts, save them with a new name to remove the `SAMPLE_` prefix. Copy the scripts to the directory where Storage Mirroring is installed.

The sample batch files provided are only examples. Because no two environments or configurations are exactly the same, you **MUST** modify the sample scripts in order to make the solution work in your environment.

Macintosh-Accessible volume failover

This section describes an example of how to configure Storage Mirroring and Oracle. Use these procedures as a guideline for creating your own implementation. Because no two environments or configurations are exactly the same, you will probably need to implement additional or different steps than what is documented here in order to make the solution work in your environment.

1. On the target machine, set the File Server for Macintosh service to manual startup. This allows the post-failover script on the target to control when the service starts on the target.
   a. Create each volume on the target machine exactly as it exists on the source. Use the Shared Folder wizard to configure each volume as a Macintosh-accessible volume. Follow these steps to start the wizard:
   b. Open the Control Panel and click **Administrative Tools**.
   c. Select **Configure Your Server**.
   d. In the Configure Your Server window, click the **File Server** link.
   e. Click **Start the Shared Folder wizard** to start the wizard, and then follow the directions provided by the wizard. On the Create Shared Folders screen, you must enable **Apple Macintosh**.

NOTE: You can automate the creation of the volumes during the failover process by using the macfile volume command in the post-failover batch file. For detailed information on how to use this command, see your Windows 2000 reference guide.

2. On the target machine, copy the chngname utility, `chngname.exe`, from the `\tools\Win2K` directory of the Storage Mirroring CD to the directory where Storage Mirroring is installed.
3. On the target, add the following lines to the end of your post-failover script.

NOTE: The sample script files provided are only examples. Because no two environments or configurations are exactly the same, you **MUST** modify the sample scripts in order to make the solution work in your environment.

SAMPLE_Postfailover Addition

```
rem Additional commands for Macintosh-accessible volume failover

rem The chngname utility (chngname.exe) must be located in the same directory where Storage Mirroring
rem is installed.

rem The following command temporarily changes the name of the server. You will need to replace
rem <drive>:\<directory>\ with the location of your Storage Mirroring chngname utility and
rem replace source_name with the name of the source machine.
<drive>\<directory>\chngname /s source_name

rem The following command starts the File Server for Macintosh service
net start "File server for Macintosh"

rem The following command changes the name of the server back to its original name. You will need to
rem replace <drive>:\<directory>\ with the location of your Storage Mirroring chngname utility.
<drive>\<directory>\chngname /t
```

NOTE: In the event of a failure, the Macintosh clients must remap the volume in order to access it. From the Macintosh client, use the Chooser to select the volume that needs to be remapped.